

## Claims

1-20. (Cancelled))

21. (Currently Amended) A method for adjusting output power for ~~improved a~~

transmitter ~~performance~~, the method comprising:

transmitting a plurality of packets at a first output power;

determining a first error rate associated with the transmission of the plurality of packets at the first output power;

~~responsive to determining the first error rate, re-transmitting~~ transmitting the ~~previously-transmitted~~ plurality of packets at a second output power, wherein the second output power is ~~different from~~ less than the first output power;

determining a second error rate associated with the transmission at the second output power;

transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power;

determining a third error rate associated with the transmission at the third output power; and

determining whether the second output power is ~~identifying~~ a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.

22. (Currently Amended) The method of claim 21 ~~further comprising:~~

~~determining if the second error rate is lower than the first error rate;~~

responsive to a determination that the second error rate is not lower than the first error rate, re-transmitting the plurality of previously transmitted packets at a third output power, wherein the third output power is different from the first output power and the second output power;

determining a third error rate associated with the transmission at the third output power; and

adjusting wherein the third second output power is the desired output power if the third second error rate is lower less than the first error rate and is greater than the third error rate.

23. (Currently Amended) The method of claim 22 ~~wherein further comprising re transmitting the plurality of previously transmitted packets at the first~~ third output power is the desired output power if the third error rate is ~~not lower~~ less than the ~~first second~~ error rate and is less than the first error rate.

24. (Previously Presented) The method of claim 21 further comprising:

determining a transmission rate of the plurality of packets; and

responsive to determining that the transmission rate is less than a predetermined value, re-transmitting the plurality of packets at the first output power.

25. (Previously Presented) The method of claim 21, wherein determining the first error rate comprises measuring a number of failed acknowledgments of transmitted packets.

26. (Currently Amended) A method for adjusting output power for a improved

transmitter ~~performance~~, the method comprising:

transmitting a plurality of packets at a first output power;

determining a first error rate associated with the transmission of the plurality of packets at the first output power;

comparing the first error rate to a predetermined error rate value;

responsive to determining that the first error rate is greater than the predetermined error rate value, ~~re-transmitting-transmitting~~ the plurality of ~~previously-transmitted~~ packets at a second output power, wherein the second output power is ~~different from~~ less than the first output power;

determining a second error rate associated with the transmission at the second output power;

transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power; and

adjusting determining whether the second output power is a desired output power based at least in part on a comparison between the first error rate, and the second error rate and a comparison between the second error rate and the third error rate if the second error rate is lower than the first error rate.

27. (Previously Presented) The method of claim 26, further comprising adjusting the second output power until a desired value of the second error rate is reached.

28. (Currently Amended) The method of claim 26 further comprising:

~~determining if the second error rate is not lower than the first error rate;~~

~~responsive to determining that the second error rate is not lower than the first error rate, re-transmitting the plurality of previously transmitted packets at a third output power, wherein the third output power is different from the first output power and the second output power;~~

~~determining a third error rate associated with the transmission at the third output power; and~~

~~adjusting~~ determining whether the third output power is a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the ~~if the third error rate is lower than and the first~~ second error rate.

29. (Currently Amended) The method of claim 28 further comprising:

determining if the third error rate is not lower than the ~~first~~ second error rate; and

responsive to determining that the third error rate is not lower than the ~~first~~ second error rate, ~~re-transmitting~~ transmitting the plurality of ~~previously transmitted~~ packets at the ~~first~~ second output power.

30. (Previously Presented) The method of claim 26 further comprising:

determining a transmission rate of the plurality of packets; and

responsive to determining that the transmission rate is less than a predetermined value, re-transmitting the plurality of packets at the first output power.

31. (Previously Presented) The method of claim 26, wherein determining the first error rate comprises measuring a number of failed acknowledgments of transmitted packets.

32. (Previously Presented) The method of claim 26, wherein the transmission at the first output power is associated with a variable data rate.

33. (Currently Amended) The method of claim 32, wherein the first error rate, the second error rate, the third error rate, and the predetermined error rate value are associated with the variable data rate.

34. (Currently Amended) The method of claim 26, wherein the transmission at the first output power, the second output power, and the ~~second~~ third output power is associated with a variable data rate.

35. (Currently Amended) The method of claim 34, wherein the first error rate, the second error rate, the third error rate, and the predetermined error rate value are associated with the variable data rate.

36. (Currently Amended) A system for adjusting output power for a ~~improved~~-transmitter performance, the system comprising:

a transmitter configured to transmit a plurality of packets at a first output power;

and

a processor configured to perform at least the following:

determine a first error rate associated with the transmission of the plurality of packets at the first output power;

determine whether the first error rate is greater than a predetermined error rate;

cause the transmitter to ~~re-transmit-transmit~~ the plurality of ~~previously transmitted~~-packets at a second output power ~~in response to determining the first error rate,~~  
wherein the second output power is less than the first output power;

determine a second error rate associated with the transmission at the second output power;

cause the transmitter to transmit the plurality of packets at a third output power, wherein the third output power is less than the second output power;

determine a third error rate associated with the transmission at the third output power; and

identify a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.

37. (Currently Amended) A system for adjusting output power for a improved transmitter performance, the system comprising:

means for transmitting a plurality of packets at a first output power;

means for determining a first error rate associated with the transmission of the plurality of packets at the first output power;

means for ~~re-transmitting~~ transmitting the plurality of ~~previously-transmitted~~ packet packets at a second output power ~~in response to determining the first error rate,~~ wherein the second output power is ~~different from~~ less than the first output power;

means for determining a second error rate associated with the transmission at the second output power;

means for transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power;

means for determining a third error rate associated with the transmission at the third output power;

means for determining whether the second error rate is lower than the first error rate;

means for determining whether the third error rate is lower than the second error rate; and

means for identifying the second output power as a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.

38. (Currently Amended) The system of claim 37, further comprising:

~~means for re-transmitting the plurality of previously transmitted packets at a third output power if the second error rate is not lower than the first error rate, wherein the third output power is different from the first output power and the second output power;~~

~~means for adjusting the third output power if the third error rate is lower than the first error rate; and~~

~~means for re-transmitting identifying the third output power as a desired output power the plurality of previously transmitted packets at the first second output power if the third error rate is ~~not~~ lower than the first second error rate.~~

39. (Previously Presented) The system of claim 37, wherein the plurality of packets is transmitted in accordance with an IEEE 802.11 protocol.

40. (Currently Amended) A computer readable storage medium encoded with instructions capable of being executed by a computer to perform output power adjusting for improved transmitter performance, the adjusting including at least the following:

transmitting a plurality of packets at a first output power;

determining a first error rate associated with the transmission of the plurality of packets at the first output power;

~~responsive to determining the first error rate, re-transmitting transmitting the plurality of ~~previously transmitted~~ packets at a second output power, wherein the second output power is ~~different from~~ less than the first output power;~~



determining a second error rate associated with the transmission at the second output power;

transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power;

determining a third error rate associated with the transmission at the third output power;

determining whether the second error rate is lower than the first error rate;

determining whether the second error rate is lower than the third error rate; and

identifying a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.